

What is claimed is:

1. A method for manufacturing a semiconductor device comprising:  
forming an N region and P region on a substrate, forming wiring so as to  
connect one or both of these N and P regions; and  
performing a processing step on a semiconductor substrate on which the upper  
5 surface of said wiring is exposed using a liquid,  
wherein said processing step is performed in a state in which the wavelength of  
light radiated onto said semiconductor substrate is 500 nm to less than 1  $\mu$ m.
2. A method according to claim 1, wherein said processing step is performed in a  
state in which said semiconductor substrate is grounded.

---

3. A method according to claim 1 or 2, wherein said processing step is a cleaning  
step performed during, before or after a step that includes chemical mechanical polishing  
(CMP) for forming said wiring.

---

4. A processing system comprising a processing unit that processes a  
semiconductor substrate using a liquid and a light source.
5. A processing system according to claim 4, wherein said light source radiates  
light having a wavelength of 500nm to less than 1  $\mu$ m onto said processing unit.
6. A processing system according to claim 4, wherein said processing unit  
provided with a rotating section that holds and rotates a semiconductor substrate, and a  
liquid supply section that supplies liquid to said semiconductor substrate, and said  
rotating section being grounded.
7. A processing system according to claim 5, wherein said processing unit  
provided with a rotating section that holds and rotates a semiconductor substrate, and a  
liquid supply section that supplies liquid to said semiconductor substrate, and said  
rotating section being grounded.

SUB A, >

8. A semiconductor device comprising:

a first N region and a P region formed on a substrate;

wiring formed so as to connect either or both of these N and P regions; and

the upper surface of said wiring being exposed to light,

5 wherein a second N region is formed independent of said first N region on said substrate.

9. A semiconductor device according to claim 8, wherein the total surface area of said first N region and said second N region is 100 to 1/100 times the total surface area of said P region.

10. A semiconductor device according to claim 8, wherein said second N region is formed at the periphery of said substrate.

11. A semiconductor device according to claim 8, wherein said wiring has any one of Cu, Al and W as its main component.

App A<sub>2</sub> >